

REMARKS**Amended Claims**

Claims 15-20 are amended herein.

In the Specification

Applicant has amended Paragraph [0015] of the Present Application, to correct a typographical error, to correct references to “storage device 110” to state “storage device 112”. Applicant contends that support for this change is apparent from the text of Paragraphs [0013]-[0015] and [0017]-[0019]; and Figure 1 and that no new matter has been added by correction of this typographical error. Applicant therefore respectfully requests that the Examiner approve the amendment to Paragraph [0015] of the specification.

Claim Rejections Under 35 U.S.C. § 101

Claims 15-20 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Applicant traverses this rejection and feels that claims 15-20 are allowable for the following reasons.

In rejecting claims 15-20, the Examiner stated that:

“Claims 15-20 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The following analysis is based on the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility.

To determine whether claims 15-20 comply with the subject eligibility requirement of 35 USC 101, we ask:

Q1- Does the claimed invention fall within one of the statutory classes? In the case, the answer is *yes* (process).

Q2- Does the claimed invention fall/cover/include a judicial exception? In this case, the answer is *yes* (abstract idea). Claims 15-20 are seemingly a patentable process. However, they are in reality seeking patent protection of a computer program in the abstract as evidenced by claims’ recitation of “[a] *computer-usable medium* having *computer readable instructions* stored thereon for execution by a processor to perform a method of error archiving for an imaging device comprising...”

Once the answer of Q2 is yes, we continue to ask the following:

1. physical application by transformation? In this case, the answer is *no*. There is no transformation or reduction of an article to a different state or thing. The computer-usable medium remains a computer-usable medium.
2. practical application that produces a useful and tangible result? In this case, the answer is *no*. In determining whether the claim is for a “practical application,” the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is “useful, tangible and concrete.” In this case, the final result achieved by the claimed invention (the computer readable instructions) is not “useful, tangible and concrete.”

Therefore, claims 15-20 are non-statutory.”

Applicant respectfully disagrees with the Examiner’s rejection of claims 15-20 under 35 U.S.C. § 101 and respectfully maintains that claims 15-20 are statutory subject matter. In particular, Applicant maintains that claims 15-20 reciting a “computer-usable medium” or a “computer-readable medium” are processes embodied in computer programs stored on a computer readable medium that produce for a specific application a useful, tangible and concrete result and therefore fall into the exception to the prohibition of claiming an abstract idea and is statutory. In particular, the practical application is a process of error archiving for an imaging device, and the useful and tangible results are the creation of an archive of information about each error that includes two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, a page number, an error code, and a stack trace.

From MPEP §2106 –“Patent Subject Matter Eligibility,” Applicant notes that MPEP §2106(IV)(C)(2)((2)) states:

“For purposes of an eligibility analysis, a physical transformation ‘is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application.’ . . . If USPTO personnel determine that the claim does not entail the transformation of an article, then USPTO personnel shall review the

claim to determine it produces a useful, tangible, and concrete result. In making this determination, *the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is 'useful, tangible, and concrete.'* . . . ”

{Emphasis Added}

Applicant also notes that MPEP §2106(IV)(C)(2)((2))(a)-(c) state:

“a) ‘USEFUL RESULT’

For an invention to be ‘useful’ it must satisfy the utility requirement of section 101. The USPTO’s official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. . . . In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by *specifically reciting in the claim the practical application.* . . .

b) ‘TANGIBLE RESULT’

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a 35 U.S.C. 101 judicial exception, in that *the process claim must set forth a practical application of that judicial exception to produce a real-world result.* . . . *In other words, the opposite meaning of ‘tangible’ is ‘abstract.’*

c) ‘CONCRETE RESULT’

Another consideration is whether the invention produces a ‘concrete’ result. Usually, this question arises when a result cannot be assured. In other words, *the process must have a result that can be substantially repeatable or the process must substantially produce the same result again.*”

{Emphasis Added}

Applicant respectfully maintains that claim 15, from which claims 16-20 depend, recites, in part, “[a] computer-readable medium having computer readable instructions stored thereon for execution by a processor to perform a method of error archiving for an imaging device” that achieves the useful, tangible and concrete result of archiving detailed information on the errors

of the imaging device by “monitoring system operations of the imaging device; and when an error is detected, compiling information about the error into an error file and storing it on a storage device for one or more of storage, transmission, retrieval, and disposal.”

As such, Applicant respectfully contends that claims 15-20 recite in the claim the specific, substantial and credible utility (detailed error archiving of device errors) of a specific practical application (detailed error archiving for imaging devices) producing a final result that is useful (the above detailed error archiving of device errors), tangible (produces the real-world result of creating the detailed archive of errors that occurred on imaging device for analysis, which is not an abstract result), and concrete (the creation and re-creation of the error archive by the claimed invention is substantially repeatable for a given sequence of errors that occur on the imaging device). Applicant therefore respectfully maintains that claims 15-20 are statutory under MPEP §2106.

Further, Applicant notes that MPEP §2106.01(I) states:

“Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. . . . In contrast, a *claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.*

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical ‘things.’ They are neither computer components nor statutory processes, as they are not ‘acts’ being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a *claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.*

. . .

USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

...

When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim.

...”

{Emphasis Added}

Applicant also notes that MPEP §2106.01(II) states:

"... USPTO personnel should be prudent in applying the foregoing guidance.

Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping or sequence of musical notes read from memory and thereafter causes another defined series of notes to be played, requires a functional interrelationship among that data and the computing processes performed when utilizing that data. As such, a claim to that computer is statutory subject matter because it implements a statutory process.”

In the interest of furthering prosecution of the Present Application, Applicant has herein amended claims 15-20 to specifically recite a “computer-readable medium” as is utilized in MPEP §2106.01. Applicant notes that computer-usable mediums are defined, at least at Paragraph [0015] of the Specification of the Present Application, and are stated as being “computer-usable media such as a static random access memory (SRAM), dynamic random access memory (DRAM), a non-volatile memory device, a register, magnetic media, optical

media, or the like.” Applicant respectfully maintains that these storage devices are computer components and therefore statutory. Applicant contends that these amendments to claims 15-20, would be understood by one skilled in the art as being enabled by the specification and therefore not new matter. Applicant also respectfully maintains that “a computer-usable medium having computer readable instructions stored thereon” would be viewed as equivalent to a computer-readable medium by one of ordinary skill in the art.

Applicant therefore respectfully maintains that claim 15, from which claims 16-20 depend, recites, in part, “[a] computer-readable medium having computer readable instructions stored thereon for execution by a processor to perform a method of error archiving for an imaging device” that achieves the useful and tangible result of archiving detailed information on the errors of the imaging device by “monitoring system operations of the imaging device; and when an error is detected, compiling information about the error into an error file and storing it on a storage device for one or more of storage, transmission, retrieval, and disposal.” As such, Applicant maintains that claim 15-20, as stated in MPEP §2106.01, are a “computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized” and that “the final result achieved by the claimed invention is useful, tangible and concrete.” Applicant therefore maintains that claims 15-20 are statutory.

As such, Applicant asserts that the relevant features of claims 15-20, in particular, the claiming of “a computer-readable media”, as a statutory claiming of a computer program in conjunction with a physical structure, that recite in the claims the specific, substantial and credible utility of a specific practical application producing a final result that is useful, tangible, and concrete, and is described in the specification in such a way as to enable one skilled in the art to practice the invention. Applicant therefore contends claims 15-20 are statutory by the analysis of MPEP §2106 and §2106.01 under 35 USC 101, and respectfully requests reconsideration and withdrawal of the rejection to claims 15-20 by the Examiner.

Claim Rejections Under 35 U.S.C. § 112

Claims 15-20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully traverses the rejections.

The Examiner rejected claims 15-20 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated that “[i]ndependent claim 15 recites ‘[a] computer-usable medium . . . comprising: monitoring system operations of the imaging device; and . . .’ A computer-usable medium is generally comprised of coded data for enabling a device to perform certain tasks. Furthermore, claim 15 now recites ‘wherein the storage device is a computer usable medium’ at line 8 of the claim. It is unclear whether this computer-usable medium refers to the computer-usable medium at line 1 of the claim, or is a different medium.”

As stated above, Applicant maintains that MPEP §2106 requires that the claims recite a specific, substantial and credible utility of a specific practical application producing a final result that is useful, tangible, and concrete. Applicant maintains, as further stated above, that MPEP §2106.01 states that for computer related inventions “a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.” Applicant thus respectfully maintains that the claims 15-20 recite in the claim the specific, substantial and credible utility (detailed error archiving of device errors) of a specific practical application (detailed error archiving for imaging devices) producing a final result that is useful (the above detailed error archiving of device errors), tangible (produces the real-world result of creating the detailed archive of errors that occurred on imaging device for analysis, which is not an abstract result), and concrete (the creation and re-creation of the error archive by the claimed invention is substantially repeatable for a given sequence of errors that occur on the imaging device) and that that the computer-readable medium of the “Beauregard”-style of claims 15-20, while encoding a computer program, are therefore a computer element product which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized and statutory under 35 U.S.C. §101. *See*, MPEP §2106 and MPEP §2106.01(I) and (II).

Applicant has also amended claim 15 herein to clarify what is claimed, stating that what is claimed is “a computer-readable medium having computer readable instructions stored thereon for execution by a processor to perform a method of error archiving for an imaging device” and that the storage device “is a computer-usable medium associated with the imaging device.”

Applicant thus contends that relevant features of claims 15-20 are definite and are described in the specification to enable one skilled in the art to practice the invention.

Applicant therefore respectfully requests that the rejection of claims 15-20 under 35 U.S.C. § 112, second paragraph, be withdrawn in that the claims are not indefinite and that the specification does clearly describe the invention in a way to enable one skilled in the art to make or use the invention.

Allowable Subject Matter

Claims 1-14 were allowed.

CONCLUSION

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No.08-2025.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2207.

Respectfully submitted,

Date: 4/26/07



Andrew C. Walseth

Reg. No. 43,234

Attorneys for Applicant
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 East Harmony Rd.
Fort Collins, CO 80527-2400